

REMARKS

Claims 19 - 24 are pending. Claims 22 and 23 are withdrawn until the independent claim is indicated as containing allowable subject matter.

In the Office Action, the Examiner rejected claims 19 - 21, 24, and 25 as unpatentable under 35 U.S.C. § 103 over U.S. Patent No. 5,984,109 to Kanwar et al. and U.S. Patent No. 5,695,636 to Gullett. Applicants have amended claim 19 and canceled claim 25 to more clearly define the invention. For at least the following reasons, Applicants respectfully submit that the application, as amended, is in condition for allowance.

Applicants' invention is the combination of a filter head and a filter. The combination allows for the use of both a spin-on canister filter and a bowl-cartridge filter to be used interchangeably upon the same filter head. This type of interchangeability can be done without the use of any special tools or adaptor structure. The concept of being able to use both types of filters on the same filter head, and without the use of any adaptor rings or other types of structure, is not disclosed or suggested in the prior art.

Attention is directed to Applicants' Figures 1 - 4. FIGS. 1 and 2 show the use of a liquid filter assembly, in which a bowl-cartridge filter is operably connected to the filter head. FIGS. 3 and 4 show the same filter head depicted in FIGS. 1 and 2. In FIGS. 3 and 4, this same filter head is operably connected to a spin-on canister filter. Note the direct connection between the respective filters and the filter head. There is no special collar, adaptor, or other structure that is needed in order to interchange between the two types of filters onto the filter head. As can be appreciated, the filter head shown in FIGS. 1 and 2 is capable of receiving both types of filters -- a bowl-cartridge filter and a spin-on canister filter. This concept is not shown in the prior art of record.

Claim 19 is directed to a liquid filter assembly. Claim 19 has been amended in order to more closely capture the inventive concept. Note that the filter head is required to be capable of receiving, separately, both a spin-on canister filter and a bowl-cartridge filter.

Further note that claim 19 requires the cartridge filter to include a region of filter media and a non-removable inner liner.

U.S. Patent No. 5,984,109 to Kanwar et al. lacks any teaching or suggestion of the invention of claim 19. The '109 patent shows only one type of filter being used with the filter head. There is absolutely no teaching or suggestion that the filter head shown in the '109 patent is capable of receiving, separately, both a spin-on canister filter and a bowl-cartridge filter.

Further, the '109 patent lacks teaching or suggestion of the cartridge filter including a region of filter media and a non-removable inner liner. In the '109 patent, the inner liner structure is removably mounted to the filter head. It is not a part of the cartridge filter.

U.S. Patent No. 5,695,636 to Gullett does not help remedy the deficiencies of the '109 patent. Gullett '636 also does not teach or suggest a filter head that is capable of receiving, separately, both a spin-on canister filter and a bowl-cartridge filter.

For at least these reasons, Applicants respectfully submit that claim 19 is allowable over the prior art of record. Claims 20 - 24 depend upon and further limit claim 19. It is respectfully submitted that each of these claims is also allowable for at least these same reasons.

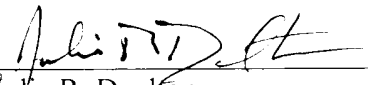
In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is in condition for allowance. Applicants request reconsideration and a Notice of Allowance.

If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below listed telephone number.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

Claim 19 has been amended as follows:

19. (Amended) A liquid filter assembly comprising:

- (a) a filter head; said filter head having a center tube, an outer tube, a first liquid flow port, and a second liquid flow port; said outer tube circumscribing said center tube;
 - (i) said outer tube defining an end, an outer tube end port at said end, and an outer tube flow passageway extending between and in fluid communication with said first liquid flow port and said outer tube end port;
 - (A) said outer tube further including an outer tube threaded region;
 - (ii) said center tube defining a center tube flow passageway and a center tube end port; said center tube flow passageway extending between and in fluid communication with said center tube end port and said second liquid flow port;
 - (A) said center tube projecting outwardly from said end of said outer tube;
- (b) [a filter operably connected to said filter head; said filter having a housing defining an interior and a cartridge filter operably oriented within said housing interior;]
one of a spin-on canister filter and a bowl-cartridge filter operably connected to said filter head; said filter head being capable of receiving, separately, both a spin-on canister filter and a bowl-cartridge filter; said one having a single piece housing defining an interior and a cartridge filter operably oriented within said housing interior; said cartridge filter including a region of filter media and a non-removable inner liner;
 - (i) said filter having a filter threaded region threadably engaged to said outer tube threaded region to define a threaded connection;
 - (A) said threaded connection having a cross-sectional thickness no greater than 10 mm;

- (ii) said filter being in liquid flow communication with said outer tube end port and said center tube end port;
- (c) a first seal arrangement; said first seal arrangement oriented to form a first seal to inhibit leakage between said outer tube flow passageway and said filter; and
- (d) a second seal arrangement; said second seal arrangement oriented to form a second seal to inhibit leakage between said center tube flow passageway and said filter.